Multimedia Appendix 3. Characteristics of the identified trials and interventions.

Reference/ Country/ Setting	Study design/ Comparator/ Duration (months)	Messages (Type/ Format/ Content)	Messages (Frequency[a]/ Timing[b])	Mobile devices and applications	Use of theory	Behavior change techniques
Tsang et al. 2001 [44] China Hospital care	Cross over Usual care 6	Bidirectional Image (graphs) Diet	2 per week/ Not reported	Hand-held electronic diary with a touch-screen (CV8300, Vtech, Hong Kong)	Not reported	Provide feedback on performance
Yoo et al. 2009 [47] South Korea University and community healthcare center	RCT Usual care 3	Bidirectional Text (SMS) Physical activity+ diet + other	3 per day/ Not reported	Mobile phone (LG-SV280; LGElectronics, Seoul, Korea)	Not reported	Provide information on consequences; Provide instruction; Provide feedback on performance; Provide contingent rewards; Prompt practice; Time management
Noh et al. 2010 [37] South Korea Hospital care	RCT Minimal intervention 7	Unidirectional Text (website) Physical activity+ diet + other	Not reported	Web-based ubiquitous information system (SK telecom [Seoul, Republic of Korea]). All mobile phones using the International Mobile Telecommunication-2000 system could connect to the system.	Not reported	Stress management
Lim et al. 2011 [36] South Korea Hospital care	RCT Usual care 6	Bidirectional Text (SMS) Physical activity+ diet + other	Variable (at least 8 per week)/ Not reported	Glucometers specifically devised for ubiquitous healthcare service (GlucoDr Supersensor, AGM-2200, Allmedicus, Korea).The glucometer transferred the tested data and stored it in a remote server.	Not reported	Provide feedback on performance; Prompt practice
Quinn et al. 2011 [39,40] US Primary care	Cluster RCT Usual care 12	Bidirectional Text (SMS) Physical activity+ diet + other	Variable (depending on patients' needs)/ Not reported	One Touch Ultra 2 glucose meter (LifeScan, Milpitas, CA), mobile phones, and a diabetes management software.	Trans-theoretical model	Provide instruction; Provide feedback on performance
Shetty et al.	RCT	Unidirectional	2 per week/	Mobile phone	Not reported	Provide information

2011 [42] India Primary care	Usual care 12	Text (SMS) Physical activity+ diet + other	Not reported			on consequences; Prompt self-monitoring of behavior; Prompt practice
Bell et al. 2012 [31] US Specialized care	RCT Usual care 12	Unidirectional Video Physical activity+ diet + other	1 per day/ Variable (participants were allowed to view the video multiple times throughout the 24-hour period before the next video was sent)	Broadband-enabled cell phone	Not reported	Provide information about behavior-health link; Provide information on consequences; Provide instruction; Stress management; Time management
Goodarzi et al. 2012 [34] Iran Community	RCT Usual care 3	Unidirectional Text (SMS) Physical activity+ diet + other	4 per week/ Not reported	Patients' mobile phone	Not reported	Provide information on consequences; Prompt intention formation; Provide instruction
Abebe et al. 2013 [29]/ Capozza et al. 2015 [33] US Primary care	RCT Usual care 6	Unidirectional Text (SMS) Physical activity+ diet + other	Variable (between one and seven messages per day, depending on participants' preference)/ Sent at convenient timing for participants	Patients' mobile phone	Not reported	Prompt intention formation; Prompt self-monitoring of behavior; Provide feedback on performance; Provide contingent rewards; Prompt practice; Stress management
Orsama et al. 2013 [38] Finland Community	RCT Usual care 10	Bidirectional Text (SMS) Physical activity+ diet + other	Not reported	Mobile telephone, software application, and assessment devices	Information-motivation-behavioral skills model	Provide information on consequences; Provide instruction; Provide feedback on performance
Arora et al. 2014 [30]/ Burner et al. 2014 [32] US Hospital care	RCT Usual care 6	Unidirectional Text (SMS) Physical activity+ diet + other	2 per day/ 9 am and 5pm	Patients' mobile phone	Not reported	Provide information on consequences; Prompt intention formation; Provide instruction
Tamban et al. 2014 [43] Philippines Unclear	RCT Usual care 6	Unidirectional Text (SMS) Physical activity+ diet + other	3 per week/ Sent at convenient timing for participants	Patients' mobile phone	Not reported	Provide information about behavior-health link; Provide information on consequences; Provide instruction;

						Prompt specific goal setting; Prompt self-monitoring of behavior; Provide feedback on performance
Islam et al. 2014 [35]/ Islam et al. 2015 [41] Bangladesh Hospital care	RCT Usual care 6	Unidirectional Text (SMS) Physical activity+ diet + other	1 per day/ Not reported	Patients' mobile phone	Behavioral learning theory and trans-theoretical model of behavioral change	Provide information about behavior-health link; Provide information on consequences; Provide instruction; Stress management
Waki et al. 2014 [45] Japan Hospital care	RCT Usual care 3	Bidirectional Text (SMS) Physical activity+ diet	Not reported	Smartphone (NEC, Tokyo, Japan: MEDIAS WP N-06C), NFC-enabled glucometer (Terumo, Tokyo, Japan: MS-FR201B), BP monitor (Omron, Kyoto, Japan: HEM- 7081-IT), pedometer (Omron HJ-720IT), and scale (Omron HBF-206IT).	Not reported	Prompt barrier identification; Provide feedback on performance
Yarahmadi et al. 2014 [46] Iran Specialized care	RCT Unclear 2	Unidirectional Text (SMS) Physical activity+ diet + other	3 per week/ Not reported	Patients' mobile phone	Not reported	Unclear

a: Number of messages sent per week.
b. Time of the day when the messages were sent.
RCT, randomized controlled trial; SMS, short message service;